Notebook, N-01-09-19

This notebook was used by two unidentified experimenters during September 1901. It contains notes regarding an unidentified experiment with concrete. The material by Edison is found on several loose items inserted into the book. The front cover is labeled "Enamel Experiments." The pages are unnumbered. Only 4 pages have been used.

9/19/07

#1

Hydrated (dry) silica	25 gm.
" Ferric Oxide	12½ "
Magnesia.	1½ "
Caustic soda dry	3½ "
~~Desiccant~~	3 "

#2.

Hydrate silica - ~~[illegible]~~	22½ gm.
" Alumina	9 "
" Ferric Oxide.	6 "
" Manganese Oxide	2½ "
Slacked lime.	20 "
Desiccant	3 "

3.

Silica	13.5	grm.
Slaked lime	8.	"
Caust soda.	4	"
Dratumin	2	"

4

Silica	10½	grm.
Alumina hydrate	6	"
Ferric "	1	"
Slaked lime	6½	"
Dratumin	2	"

#5

Formula made according to the analysis of agate ~~from~~ manual analysis.

Fe_2O_3 Hydrate	-10.1	=	Fe_2O_3 - 8.6
Al_2O_3 "	6.57	=	Al_2O_3 - 4.44
SiO_2 "	61.20	=	SiO_2 - 53.50
Mn_2O_3 "	5.00	=	Mn_2O_3 - 4.22
MnO_2 —	4.01	=	MnO_2 - 4.01
$NaHO$ —	29.9	=	Na_2O - 25.00

#6.

7½ Grams Hydrated Silica
7½ " PbO
7½ " Boric Acid
7½ " ZnO.

Fused

#7

7½ Grms. Hydrated Silica
7½ " CdO.
7½ " Boric acid
7½ " ZnO.

Fetlefuses

#9.

10 Grms CuO.
10 " Boric Acid

reduced to metallic Cu.

[ITEM FOUND IN BOOK]

Gum Tragacanth, ✓
Dextrine - ✓
Thick Molasses
Silicate of Soda ✓
Castor Oil -
Olive Oil - ✓
Syrupy acetate of Magnesia - ✓

Try a mixture of equal quantities of solid powders
Acetate Iron - acetate Lime acetate
Magnesia - acetate Alumina -
Mix these above with equal quantity
of Dry Silicate of Soda - + moisten the
whole with water & grind together
until pulpy so can dip
Dry + then fire very slowly to yellow white
heat =

[ITEM FOUND IN BOOK]

Silica 38 grams
Aluminum hydroxide 31 "
Slaked Lime 12 "
Dry Carbonate Soda 5 grams

Silica 48 grams
Aluminum hydroxide 26 grams
Slaked Lime 3 grams
Dry Caustic Soda 14 grams

Silica 40 grams
Aluminum hydroxide 11 grams
Ferric " 14
Slaked Lime 6 grams
Dry Caustic Soda 1 gram

[ITEM FOUND IN BOOK]

Dry

Amorphous Silica 50 grammes
Hydrated Ferric oxide 33 "
" Ox Magnesia 3 "
Dry Caustic Soda 7 "

Silica 45 grammes
Hydrated Oxide Alumina 18 grammes
" Ferric oxide 10 "
" Manganese oxide 5
Slaked Lime — 20 "

Silica 54 grammes
Slaked Lime 32 "
Dry Caustic Soda 8 grammes

Silica 42 grammes
Alumina hydroxide 23 grms
Ferric " 4 "
Slaked Lime — 26 "

[ITEM FOUND IN BOOK]

P 23 Fe 0, Fe, 40 -
Mett, 1.5

B 63 Mg 30 - Fe 2 fewer 2
Sal acid

Wolfa 75 Fe 18 Mn 5

Gigolte. fewer Al 12 Na 32

7 50 Al 14 Ca 14 Na 7 Si 2
fewer even more easily than Gigolte
Chemglass

Si 52 Fe 31 Mn 3 Na 10
fewer 2 only slightly acted on
50 Al 2 Fe 35 Mn 7.5 Ca 1.5 fewer 2
not affected acids

[ITEM FOUND IN BOOK]

Phos 32 Fe 31 Mn 32 Ca 2
Fluoro 1.5 very low

Silica 30 grms
Aluminum hydroxide 4
Ferric " 59
Manganese " 3 3.7

Silica 32
Ferric hydroxide 32 grms
Manganese " 35

[ITEM FOUND IN BOOK]

Chemic Test.

Fe_2O_3	6.60 %
Al_2O_3	4.44 %
SiO_2	53.50 %
MnO_2	4.22
SnO_2	4.01
As_2O_3	0.02
Na_2O	25.79

[ITEM FOUND IN BOOK]

Al_2O_3 $3H_2O$ 2 — 1.35 Al_2O_3 67.5 % ✓

Fe_2O_3 hydrate. 2 — 1.7 Fe_2O_3 85 %

$Fi\,O_2$ " 2 — 1.75 $Fi\,O_2$ 87.5 % ✓

MgO " 2 — 1.35 MgO 67.5 % ✓

Mn_2O_3 Hydrate 2 — 1.70 Mn_2O_3 85.0 % ✓

2 : 1.35 = 100 : x

135.00 | 2

67.5

1.35 × 50 = 67.50

1.7 × 50 = 85.00

1.75 × 50 = 87.50

1.35 × 50 = 67.50

1.70 × 50 = 85.00